

# **FUNCTIONAL REQUIREMENTS OF MOBILE APPLICATION FOR FISHERMEN**

**AKANMU SEMIU AYOBAMI**



**Universiti Utara Malaysia**

**2013**

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I certify that any help received in preparing this thesis and all sources that are used have been acknowledged.

**Akanmu Semiu Ayobami**

809924

Awang Had Saleh Graduate College of Arts and Science,

Universiti Utara Malaysia,

06010 Sintok,

Kedah,

Malaysia.

January, 2013.

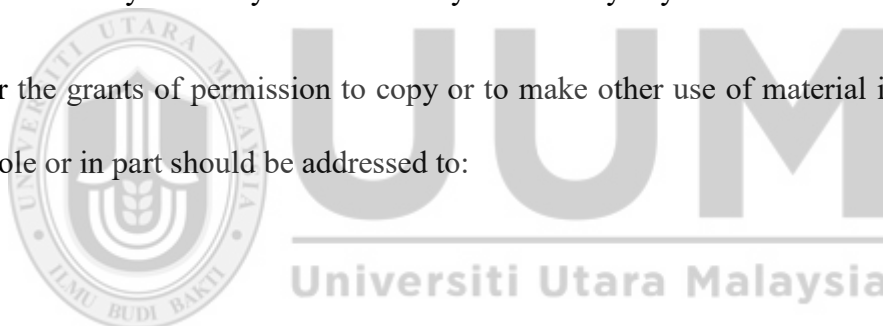


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## **DEDICATION**

I dedicate this research project report to all who are losing hope or have lost hope in becoming great in life because of trials and tribulations.

They must revive the hope, and believe that breathing in and out as a living human must continuously re-kindle the light of hope. Believe in yourself, set your goal, work as if you will not pray, and pray as if you will not work.



## ABSTRACT

Generally, un-usable information technology products and its unacceptability have been traced to the inability of the tech products to meet the needs and desire of the users, for whom the products are provided. And specifically, the Malaysia government has been recording same users neglect on information technological infrastructure provided despite huge amount of money invested on the ICT project, most especially for the rural dwellers. The major reason of this users' unacceptability have been traced to lack of proactive users' requirements gathering as expected to be part of the product development process. To address this in the intending development of mobile application for fishermen; who are also members of the target group to be provided mobile technologies by the Malaysian government; this study aims to validate the functional requirements of mobile applications for fishermen using a Qualitative-biased users' participatory design methodology which included a prototype development process. The result of the study shows that ability to get weather updates, real time market price and general fishing tips are validated functional requirements of a mobile application centered to be used by fishermen.

**Keywords:** user-centered, mobile application, functional requirements, fishermen

## ABSTRAK

Secara umumnya, banyak produk-produk teknologi maklumat (IT) yang dibangunkan tidak mencapai tahap kepenggunaan dan tahap keberkesanannya terhadap pengguna-pengguna, mungkin disebabkan tidak memenuhi kehendak pengguna atau alasan lain.

Khususnya kepada kerajaan Malaysia, walaupun sejumlah wang besar telah dilabur kepada projek ICT, terutamanya kepada penduduk luar bandar, namun masih ramai pengguna yang mengabaikan infrastruktur teknologi maklumat (IT) yang telah disediakan dan cuba dibangunkan untuk kemudahan bersama.

Sala satu faktor utama yang menyumbang kepada perkara diatas berlaku adalah kurangnya cara yang efektif dan proaktif dalam mengumpul keperluan dan kehendak pengguna seperti mana yang difahami bahawa proses pengumpulan maklumat dan keperluan adalah prosedur yang penting dalam membangunkan sesebuah produk.

Untuk mengatasi perkara ini, dengan adanya pembangunan aplikasi mobil untuk para nelayan yang mana merupakan salah satu kumpulan target untuk teknologi mobil oleh kerajaan Malaysia; kajian ini adalah untuk mengesahkan keperluan berfungsi untuk mobil aplikasi bagi para nelayan dengan menggunakan kaedah kualitatif yang melibatkan penyertaan pengguna yang juga melibatkan proses pembangunan prototaip.

Hasil keputusan kajian ini menunjukkan pengemaskinian cuaca, harga pasaran, dan tips umum untuk menangkap ikan adalah keperluan berfungsi bagi pembangunan mobil yang akan digunakan oleh nelayan.

Perkataan-utama: tumpuan pengguna, aplikasi mobil, keperluan berfungsi, nelayan

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## **CHAPTER ONE**

### **INTRODUCTORY PART OF THE STUDY**

#### **1.0 Introduction**

This chapter serves as the introductory chapter to the entire research study contained in this thesis, thus consists of the background of the study which explains where the study specifically stemmed from, the motivation of the study expressing what brought about the researcher's interest on a general overview, and specifically the problem statement that narrowly pointed to why this study is conducted. Also included in this chapter are the research objectives, research questions, the scope of the research expressing the research coverage, and the significances of the study which highlights the deliverables of this research. In conclusion is a summary that expresses the summarised content of areas covered in this chapter.

#### **1.1 Background of the study**

The emergence of internet and its usage for communication and information sharing purposes has undoubtedly brought a sharp shift and enhanced productivity in all human endeavours especially in the academic, business, management and entertainment activities, and it has been indeed utilized to meet up with the global demand, maintain international connectivity, and remain competitive in the fast-changing business world. In its inception, computers are

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